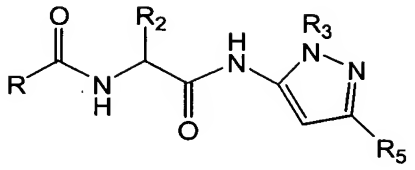
What is claimed is:

1. A compound of Formula I:

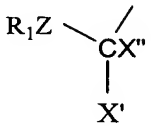


Formula I

or a pharmaceutically acceptable salt thereof,

wherein R is substituted or unsubstituted aryl, cycloalkyl, heterocyclic, alkoxy, cycloalkoxy, aryloxy, heteroaryloxy, alkylamino, cycloaklylamino, arylamino, heteroarylamino; or

R is



wherein X' and X" are each independently hydrogen, hydroxy or fluoro, provided when one of X' and X" is fluoro, the other is not hydroxy; or

X' and X" together form an oxo group,

Z is selected from the group consisting of alkyl, nitrogen, oxygen, sulfur and a bond covalently linking R_1 to -CX'X"-

R_1 is selected from the group consisting of hydrogen, substituted or unsubstituted alkyl, alkenyl, aryl, cycloalkyl, cycloalkenyl, heteroaryl, and heterocyclic;

R_2 is selected from the group consisting of hydrogen, C_1-C_4 alkyl, alkylalkoxy, alkylthioalkoxy, -$COOR_{2a}$, and -COR_{2a} wherein R_{2a} is hydrogen, C_{1-4} alkyl, cycloalkyl, or heterocycle;

R_3 is H, substituted or unsubstituted, linear-, branched- or cyclo-alkyl or substituted or unsubustituted phenyl;

R_5 is $-Y-R_6$, wherein Y is substituted or unsubstituted alkyl, alkenyl, aryl, cycloalkyl, cycloalkenyl, heteroaryl, heterocyclic, or a bond; and

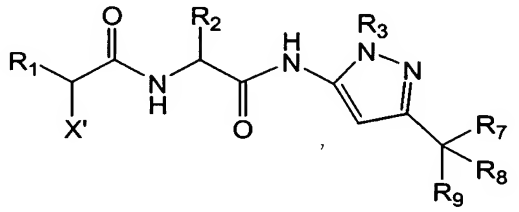
R_6 is substituted or unsubstituted aryl, heteroaryl, cycloalkyl, heterocycloalkyl, aryloxide, heteroaryl N-oxide, or arylsulfide;

provided when Y is a bond, then either R_6 is cycloalkyl, or R_2 is alkylalkoxy or alkylthioalkoxy.

2. The compound of Claim 1, wherein R = $-CR_1X'X''$, X' is H or OH, X'' is H, and R_1 is aryl or substituted aryl.

3. The compound of Claim 1, wherein R_3 is H or t-butyl.

4. A compound of Formula II:



Formula II

wherein R_1 is aryl, or substituted aryl; X' is H or OH; R_2 is CH_3, R_3 is H, or t-butyl; R_7 is aryl, substituted aryl, or U-Aryl, wherein U is O or CH_2; and R_8 and R_9 are independently H, or alkyl.

5. A pharmaceutical formulation comprising the compound according to any one of Claims 1-4 and a pharmaceutically acceptable carrier.

6. A method for inhibiting β-amyloid peptide release or synthesis in a cell comprising administering to said cell a compound according to Claim 1, in an amount effective in inhibiting the cellular release and/or synthesis of β-amyloid peptide.

7. A method for inhibiting γ-secretase activity comprising administering to a host an effective amount of the compound according to Claim 1.

8. A method for treating or preventing a neurological disorder associated with β-amyloid peptide production comprising administering to a host a pharmaceutical formulation comprising a therapeutically effective amount of the compound according to Claim 1.

9. The method according to Claim 8, wherein said neurological disorder is Alzheimer's disease.